

incorporating an oxygen-free material directly into said surface to passivate the surface of said first conductive layer to reduce the ability of the first conductive layer to associate with oxygen, the oxygen-free material being selected from a group consisting of phosphine and methylsilane;

depositing a second conductive layer on said surface after incorporating the oxygen-free material into the surface;

exposing said second conductive layer to a thermal process;

and wherein said step of depositing a first conductive layer comprises depositing a capacitor plate;

and wherein said method further comprises depositing an insulator over said second conductive layer; and

said step of exposing said second conductive layer to a thermal process comprises flowing said insulator.

82. (Twice Amended) A method of forming a semiconductor device,

comprising

providing a first conductive layer having a surface and having an ability to associate with oxygen;

E2
placing the surface of the first conductive layer in direct contact with an oxygen-free atmosphere under appropriate conditions to passivate the surface and reduce the ability of the first conductive layer to associate with oxygen, the oxygen-free atmosphere including a material selected from a group consisting of phosphine and methylsilane;

providing a second conductive layer on the surface of the first conductive layer;

subjecting the second conductive layer to a thermal process; and wherein depositing a first conductive layer forms a capacitor plate and wherein the process further comprises depositing an insulator over the second conductive layer and wherein exposing the second conductive layer to a thermal process comprises flowing the insulator.

E3
86. (Amended) A method of forming a semiconductor device, comprising:
depositing a first conductive layer having a surface and having an ability
to associate with oxygen;

incorporating a selection consisting of phosphine and methylsilane and
combinations thereof directly into the surface to passivate the surface of the first conductive
layer to reduce the ability of the first conductive layer to associate with oxygen;

depositing a second conductive layer on the surface after incorporating the
oxygen-free material into the surface; and

exposing the second conductive layer to a thermal process.

E4
95. (Amended) A method of forming a semiconductor device, comprising:
providing a first conductive layer having a surface and having an ability to
associate with oxygen;

placing the surface of the first conductive layer in direct contact with a
selection consisting of phosphine and methylsilane, and combinations thereof under appropriate
conditions to passivate the surface and reduce the ability of the first conductive layer to associate
with oxygen;

providing a second conductive layer on the surface of the first conductive
layer; and

subjecting the second conductive layer to a thermal process.

REMARKS

Claims 37-39, 76-80, and 82-99 are currently pending in the present patent application. Claims 76-80 and 90-94 have been allowed, and the Examiner is thanked for his allowance of these claims. The Examiner rejected claims 37-39, 82-89, and 95-99 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,438,012 to Kamiyama *et al.* ("Kamiyama") in view of U.S. Patent No. 5,846,859 to Lee ("Lee").

Claim 37 has been amended to recite a method of forming a semiconductor device including depositing a first conductive layer having a surface and having an ability to associate